continuous-current machines, and the latest form of Mordey's alternator.

The inclusion of a larger number of thoroughly practical examples of dynamo specification and construction would also be an improvement.

On the whole, Signor Ferrini's book seems the outcome of an earnest endeavour to give an accurate and full account in moderate compass of an important and difficult subject. It will be more easy to judge of the full measure of the author's success when the work is completed. In any case the book seems likely to be a credit to Italian technical literature. A. GRAY.

MR. A. NORMAN TATE.

BY the death of Mr. A. Norman Tate, F.I.C., Liverpool has lost one of her most prominent citizens and men of science. It is not only as an able analytical chemist that Mr. Tate will be missed by a large section of the public to whom his genial presence was familiar, but as a scientific teacher and pioneer of the technical education movement in Lancashire, his place is one that will not easily be filled. For some time past Mr. Tate has had indifferent health, and has had to give up much of his active work in connection with the Society of Chemical Industry, of whose Publication Committee he was a member, and the numerous local and other learned societies to which he gave great aid. Latterly, symptoms of an ulcerous tumour in the stomach presented themselves, from which he died on the 22nd instant.

Mr. Norman Tate was a native of Wells, Somerset, and came to Liverpool about thirty-five years ago, when he entered the laboratory of the late Dr. Sheridan Muspratt. He published several papers bearing on his early researches in the journals of the Chemical Society of London and the Royal Dublin Society. After acting for some years as chemist to the firm of John Hutchinson and Co., of Widnes, he commenced practice as an analyst in Liverpool, and became consulting chemist to several important local bodies and chemical manufactories. At that time the importation of petroleum from America was beginning, and on this subject Mr. Tate became an authority; one of his works, "Petroleum and its Products," being translated and re-published in France and Germany. For a time Mr. Tate superintended the working of oil refineries in the Isle of Man and in Flintshire, where he erected a manufactory for the production of coal and shale oils. In 1870, Mr. Tate, in conjunction with Mr. James Samuelson, undertook the initiation of the Liverpool Science and Art Classes, which grew to be a great educational power in the city. As honorary principal, Mr. Tate had charge of these classes, besides giving lectures himself and teaching several of the classes in chemistry, botany, and general biology. He also instituted the Liverpool Science Students' Association, and the Liverpool District Science and Art Teachers' Association, of both of which bodies he was the first president, a post he also filled in the local Geological Association, Microscopical Society, Liverpool Section of the Society of Chemical Industry, and other institutions, contributing largely to their "Transactions." The "Proceedings" of the Liverpool Geological Society also contain many of his papers and memoirs. He discovered the presence of iserine in the decomposed greenstones of the Boulder Clay in the Valley of the Mersey, and showed that the black colour of certain sandstones in the trias in the neighbourhood of Liverpool is due to the grains being coated with peroxide of manganese.

Mr. Tate was an ardent supporter of every educational movement, especially in connection with science teaching, and his death, at the early age of fifty-six, will be much deplored by a circle of friends extending far beyond the limits of the city which he had made the chief scene of his labours. O. W. J.

THE BRITISH ASSOCIATION.

EVERYTHING is now practically ready for the meeting of the British Association, which begins next week, and promises to be in every way most successful. Many distinguished foreign men of science—among them Helmholtz, Cremona, and Sachs—are expected to be present. The arrangements made by the local committee we described last week.

In compliment to the President there will be a specially strong muster of geologists. We hear that a number of professors and others connected with the Geological Survey of France are coming. Baron von Richthofen and Prof. Credner will represent the geologists of Germany; Prof. Renard those of Belgium. There will be many other representatives from different countries in Europe and from America. The geological excursions will likewise form a prominent feature in the proceedings, and one of these is to be conducted by the President of the Association in person. The Prince of Monaco, well known for his scientific researches, intends to bring his deep-sea dredging vessel to Granton, and to read a paper on the results of his marine surveys; while two members of his scientific staff will communicate papers on some of the natural history objects obtained by them. Already a large amount of hospitality has been organized, and the meeting bids fair to be as successful in a social as in a scientific way.

We have already announced that at the meeting of Section A. on Monday, August 8, a discussion on the subject of a national physical laboratory will be opened by Prof. Oliver J. Lodge, F.R.S.

A meeting of the Electrical Standards Committee will be held on Thursday, August 4. It is expected that Dr. von Helmholtz, Dr. Lindeck of the Berlin Reichsanstalt, and others interested in electrical measurements, will be present. A discussion will take place with a view to securing an absolute uniformity in the standards adopted in England and elsewhere. The following points will be considered:—(1) The value of the B.A. unit in ohms; (2) the specific resistance of mercury in ohms; (3) standardizing by the electrolysis of silver; (4) the electromotive force of a Clark cell; (5) Report of the Committee for 1892. It is proposed to take the report of the Committee in Section A. on Tuesday, August 9. The draft prepared by the secretary is formal; but it is hoped that the discussion in the Committee may lead to some resolutions, which will be included in the report.

The proceedings of Section D. promise to be exceptionally interesting. The President's address will relate to some qualities of sensation, with special reference to colour sense. On Friday there will be a joint discussion with B. on chemical aspects of the action of Bacteria, which will probably be opened by Prof. Marshall Ward. On Monday there will be a discussion on some matters connected with sea-fishes and fisheries, in which the following will read short papers or take part:—Sir J. Gibson Maitland, Prof. M'Intosh, Prof. Ewart, Dr. Fulton, Prof. Herdman, Mr. E. Holt, Mr. R. Smith, Mr. G. Brook, &c.

NOTES.

THE summer meeting of the Institution of Mechanical Engineers, to which we referred last week, began at Portsmouth on Tuesday, under the presidency of Dr. William Anderson, F.R.S. The president, council, and members were received by the Mayor, who cordially welcomed them to Portsmouth.

THE British Medical Association's sixtieth annual meeting was opened at Nottingham on Tuesday, the chair being occupied by Dr. W. Withers Moore. In his presidential address Dr. Moore dealt with the progress which has been made in surgery and medicine since 1857, when the Association held its last meeting at Nottingham.

A GENERAL meeting of the Sanitary Inspectors' Association was held at Carpenters' Hall, London Wall, on Saturday evening last, the president, Dr. B. W. Richardson, presiding. The council presented a report upon the question of examination for sanitary inspectors, recommending that they should be empowered to confer with the court of the Carpenters' Company in order to arrange for lectures and examinations. The report was adopted. A report upon the association's recent visit to Paris was also presented, setting forth the principal features and incidents of the journey. The adoption of this report was moved by Mr. Alexander, and seconded by Mr. Tidman. The chairman, in supporting the motion, said the association had learned many important lessons upon the question of sanitation by their visit to the French capital. After comparing the French and English systems of sanitation, he expressed the opinion that in the matter of disinfection the English might learn much from their French neighbours. He believed that in London there might with advantage be established one or more grand centres for disinfection such as existed in Paris. He deprecated the system in use at the Paris Morgue of freezing dead bodies for the purpose of identification as being, in his belief, utterly useless for that purpose. On the question of the inspection of animal food, he thought that England could not do better than follow the system adopted in France of testing every doubtful animal before it went to the shambles. A discussion followed, and on the motion of the chairman an ambulance committee was formed to report on the ambulance system in London. The report was adopted.

AN official telegram received at the Hague from Batavia confirms to some extent the statement made at Sydney as to a terrible volcanic eruption in the island of Great Sangir. The volcano which caused the disaster is named Gunona Awu. The telegram adds that the whole of the north-western portion of the island was entirely destroyed, 2,000 persons being killed. The victims included no Europeans. The rest of the island has also suffered seriously by the eruption, but it is hoped that the damage may be repaired in the course of six months. The crops have been destroyed.

FOR some days the eruption of Mount Etna seemed to be gradually decreasing, but on Tuesday it was again very violent, and there were loud subterranean noises. On Monday evening there was a shock of earthquake at Mineo, thirty-seven miles to the south of the volcano. A correspondent of the *Times*, writing from Catania on July 18, says that the exact seat of the eruption cannot be discovered from that city on account of the dense masses of smoke with which that side of the mountain is enveloped, but from Augusta, a town situated about 15 miles away, the summit and western outline are to be seen standing out in bold prominence against the deep, gentian-blue of the Mediterranean sky, and, with its endless volumes of steam and smoke rolling away to the eastward, Etna presents an indescribably imposing, not to say majestic, appearance. From this little town the scene is sublime.

THE cause of the terrible disaster at St. Gervais is now being investigated by several men of science. There can be no doubt that it originated in the small glacier called the TêteRousse, which is nearly 10,000 feet above sea-level. According to a correspondent of the *Times*, who writes from Lucerne, Prof. Duparc is of opinion that the habitual drainage of this glacier had for some reason or other become either totally blocked or obstructed; the water gradually accumulated in its natural concavity or bed; and the ever-increasing volume had exercised such an enormous pressure as to force a passage and carry away a portion of the face of the glacier with it. The mass of ice and water rushed down the rocks which dominate the glacier of Bionnassay, not in a single stream but in several, and then reunited into one enormous torrent at the foot of the Bionnassay glacier. A different theory is held by Prof. Forel, of which the correspondent of the *Times* gives the following account:—Professor Forel does not see how a quantity of water sufficient to force away so large a portion of the glacier could possibly accumulate in so small a body as the Tête Rousse, which has a total superficies of less than one hundred acres. It slopes freely on three sides; it is, in fact, one of the most abrupt of the whole chain of Mont Blanc; and, in a glacier of this description, with an altitude of nearly 10,000 ft., there are none of the conditions of a great accumulation of water. In his opinion, therefore, we must look for the main cause of the disaster in the natural movement and breaking up of the glacier. He estimates the volume of ice which fell at between one and two million cubic metres. The mass, first in falling and then rushing down the rapid slope, became transformed, for the most part, into what he calls a lava of ice and water. The ravine, he says, through which this avalanche rushed shows no traces of any great evacuation of water; in the upper portions of its transit there is no mud and no accumulation of sand, but, on the other hand, there are great blocks of glacier ice strewn everywhere, and at several points he found portions of powdered ice mixed with earth. Then, again, if this had been simply a torrent of water falling, it would have found its way down the more violent inclines, instead of, as in this case, passing straight over the frontal moraine at the foot of the glacier. In this higher region, therefore, all the evidence points to an avalanche of ice, which, starting at an altitude of nearly 10,000 ft., and descending at an incline of 70 per cent. for 5,000 ft., was pulverized by its fall, a large portion of it being melted by the heat generated in its rapid passage and contact with matters relatively warm. It rushed into the ravine by the side of the glacier of Bionnassay and joined the waters of the torrent which issues therefrom, and, further aided by the stream of Bon Nant, it became sufficiently liquid to travel down the lower portions of the valley at the slighter incline of 10 per cent., and yet retained sufficient consistency to destroy everything in its passage. That this torrent was not composed merely of mud and water is proved, he says, by the fact that it did not always maintain the same height when confined to the narrower ravine, and that the remains on the sides of the rock show it to have been a viscous substance rather than fluid.

AN entire change of weather set in over these islands during the past week. The severe storm referred to in our last issue passed quickly to the south-eastward across the Channel, and subsequently traversed Switzerland and Italy. This was succeeded by an area of high barometer readings, which reached this country from off the Atlantic, and extended eastwards over a great part of Europe. Anticyclonic conditions have since been very persistent, with an unusual amount of cloud, especially in the north and south, and, occasionally, mist or fog, but the weather was otherwise fine and very dry. Temperature remained low, under the influence of northerly and easterly winds, the maxima seldom exceeding 70°, while the night minima have also been low, especially over the inland districts of England, where, in places, readings have fallen to within 10° of the freezing point.

THE Vatican Observatory, recently established by Pope Leo XIII., has issued volume ii. of its "Pubblicazioni," containing the results of the most important researches undertaken at the observatory, together with a summary of the proceedings of the meetings held in the year 1891, which comprise a collection of notices relating to astronomy and terrestrial physics. Prof. J. Buti contributes papers (1) on the variations of temperature at different heights. The maxima were generally highest at the lower station, especially in spring and summer, while in winter the conditions were reversed. The mimima were higher throughout the year at the higher station than those near the ground. These results are in accordance with those obtained by the director, Padre Denza, in the case of observations taken at Turin. (2) On rainfall at different heights. The results show that the amount of rainfall is greater at the higher station at times of heavy rain, and conversely at times of slight rain. (3) Comparisons of relative humidity, tension of vapour, and temperature, accompanied by curves. The work also contains hourly observations from January to June, photograms of lunar regions, phototypes of some constellations and nebulæ.

AS an illustration of the specialization of scientific teaching on the Continent, we may mention that Dr. H. Schinz has been appointed Professor of Systematic Botany at the University of Zürich, in order that Prof. A. Dodel may devote his course of lectures entirely to Anatomical and Physiological Botany.

GENERAL PARIS, of Dinard (Ille-et-Vilaine, France), is engaged in the preparation of a *Nomenclator Bryologicus*, on the plan of Steudel's "Nomenclator Botanicus." He will be greatly obliged if bryologists of all countries will send him copies of recent memoirs, or an exact reference to the description of all new species, accompanied, where possible, by a specimen.

A NEW botanical publication has made its appearance under the title *Arbeiten aus dem K. Botanischen Garten zu Breslau*. It is edited by Prof. Prantl and will be devoted to the record of work done in the Botanic Garden at Breslau. The first number contains a paper by Prof. Prantl, on the Classification of Ferns, one by Herr Pomrencke on the structure of the wood of certain gamopetalous families, and one by Herr Mez on the Lauraceæ.

IN addition to the Vascular Cryptogams collected under the auspices of the West India Exploration Committee by Mr. R. V. Sherring, F.L.S., in the island, and described in the *Annals of Botany*, Vol. vi., No. 21, April, 1892, by Mr. J. G. Baker, F.R.S., his collections at Kew have yielded about thirty species of Orchids from Grenada, some of which are of considerable interest. They have now been determined by Mr. R. A. Rolfe, A.L.S. The orchids of Grenada appear not to have been systematically collected before. There are no records of species from that island in Grisebach's *Flora of the British West India Islands*, 1864, and only about three or four were represented in the Kew Herbarium. Mr. Sherring's collections, therefore, enable us to arrive at a tolerably good idea of the distribution of orchids in the island. A species of *Brachionidium*, a genus not hitherto represented in the West Indian flora, is probably new, as also species of *Scaphyglottis* and *Cranichis*. *Hexisia reflexa*, *Pleurothallis pruinosa*, *Oncidium luridum* and *Ornithocephalus gladiatus* have not hitherto been found in the smaller islands, the recorded specimens being chiefly from Jamaica and Trinidad. *Dichœa hystricina* has not been found before except in Cuba by Wright and Eggers. *Xylobium* (*Maxillaria pallidiflora*) was recorded before only from St. Vincent, and *Elleanthus lepidus* is new to the West Indian flora. The remaining species are found in many islands, such as Jamaica and Dominica, but their occurrence still further south is a point of some interest.

THE City and Guilds of London Institute has issued a list of the candidates who have passed its examination for the teacher's certificate in manual training. The examination is limited to teachers in public elementary schools. It was held this year for the first time, and related to woodwork. As a large number of teachers had been receiving manual instruction before the institution of the examination, a limited number of candidates were allowed to present themselves for the final examination without having passed the first year's examination. There were 275 candidates for the first year's examination, and of these forty-seven passed in the first class, 108 in the second, and 120 failed. For the final examination there were 340 candidates, of whom forty-nine passed in the first class, 146 passed in the second class, while 145 failed. The examiners report, as regards the first year's examination, that the practical wood-working was uniformly well done, but that the drawing was badly done by a large number of candidates. "It is obvious," they add, "that the instruction in practical drawing is not good. Many candidates failed even to understand the examination paper." In the advanced examination the drawing was much better.

THE Yorkshire College, Leeds, has issued the first report of its department of Agriculture. We are glad to note that the County Lectures to farmers have, as a whole, been successful beyond the most sanguine anticipations of the committee. The unsympathetic attitude which the farmers at some of the centres assumed at first with respect to these lectures was often speedily changed to warm appreciation, which rose, in certain cases, to enthusiasm. The attendance, which was sometimes small at the beginning, grew larger and larger as the course proceeded, and although it afterwards fluctuated for various reasons, the chief of which was the unfavourable state of the weather, which in sparsely populated districts made a journey to the lecture a matter of considerable time and difficulty, the average attendance was extraordinarily good. To the classes and practical demonstrations, which followed many of the lectures, a considerable portion of the audience remained, and their eager participation in the discussions and tests, which formed a conspicuous part of the work of these classes, was extremely encouraging to the lecturers.

AT a meeting of the London Chamber of Commerce on Monday, Mr. J. Ferguson read a paper on "The Production and Consumption of Tea, Coffee, Cacao (cocoa), Cinchona, Cocoanuts and Oil, and Cinnamon, with reference to Tropical Agriculture in Ceylon." He referred to the position of Ceylon, its forcing climate, its command of free cheap labour, and its immunity from the hurricanes which periodically devastated Mauritius, from the cyclones of the Bay of Bengal, and from the volcanic disturbances affecting Java and the Eastern Archipelago. The plantations of Ceylon afforded, he said, the best training in the world for young men in the cultivation and preparation of tropical products, and in the management of free coloured labour. The cultivation of cane sugar, although tried at considerable outlay on several plantations forty and fifty years ago, proved a failure. More recently experiments by European planters with tobacco had not been a success, nothwithstanding that the natives grew a good deal of a coarse quality for their own use. Although cotton growing had not been successful, the island had proved a most congenial home for many useful palms, more particularly the coconut (spelt without the "a" to distinguish it and its products from cocoa—the beans of the shrub Theobroma cacao) and palmyra, as also the areca and kitul or jaggery palms. Within the past few years Ceylon had come to the front as one of the three great tea-producing countries in the world, India and China being the other two, with Java at a respectable distance. Mr. Ferguson said one of the chief objects of his pape was to demonstrate which of the products of the island it was safe to recommend for extended cultivation in new lands and which were already in danger of being over-produced, and he had arrived at the conclusion that coffee, cacao, and rubber-yielding trees were the products to plant, while tea, cinnamon, cardamoms, cinchona bark, pepper, and even palms (for their oil) did not offer encouragement to extended cultivation. Statistics relating to the total production and consumption were given in an appendix.

AN interesting paper on Indian types of beauty was read some time ago by Mr. R. W. Shufeldt, before the Philosophical Society of Washington, and has now been issued as a pamphlet. It is admirably illustrated.

MR. A. G. HOWES, British Consul at Tahiti, in his latest annual report to the Foreign Office, has the following note respecting pearl-shell diving in Tahiti:—Since the introduction of the diver's dress and apparatus at the pearl fisheries in 1890 a considerable increase in the export of shell has been maintained over the previous years. A strong feeling has, however, been exhibited by the natives, who adhere to their own system of diving, against this means of taking the shell, and has resulted in a communication being made by the Director of the Interior of the colony to the Chamber of Commerce at this place, recommending the gradual abolition of the diving dress and apparatus and the stoppage of further issue of patents for the same, from January 1, 1893. The Chamber of Commerce have expressed their approval of the suggestion, but consider that an entire and not gradual abolition of the diving dress and apparatus should take place, and they have decided to lay this proposal before the Conseil-Général when it assembles next August. The reasons set forth by the Chamber of Commerce for adopting this course are that the regulations for the use of the diving dress and apparatus have been abused. They state that French citizens, contrary to rule, have under their name employed diving dress and apparatus owned by foreigners; that the law prohibiting pearl fishing by this means in a depth of less than ten fathoms had not been adhered to, and they also give as their opinion that the shells found in a greater depth than ten fathoms are those mostly important for reproduction, and to destroy them will ruin the fisheries and bring distress upon the natives who depend upon the pearl-shell diving for their livelihood.

THE additions to the Zoological Society's Gardens during the past week include a Common Marmoset (*Hapale jacchus*) from South-east Brazil, presented by Mr. Gerald F. Youll; an African Civet Cat (*Viverra civetta*), a white-tailed Ichneumon (*Herpestes albicauda*), two Ostriches (*Struthio camelus* ♀ ♀) from East Africa, presented by Mr. F. Pardage; a Pine Marten (*Mustela martes*), British, presented by Mr. Harold Hanauer, F.Z.S.; three North American Turkeys (*Meleagris gallo-pavo*) from North America, presented by Col. H. W. Feilden, C.M.Z.S.; two Rufous-necked Wood Doves (*Haplopelia larvata*) from South Africa, presented by Mr. W. H. Wormald; a Grand Eclectus (*Eclectus roratus*) from Moluccas, presented by Messrs. Chas. and Walter Seton; two Red-crested Cardinals (*Paroaria cucullata*) from South America, presented by Miss Edith M. Fox; a Common Chameleon (*Chamæleon vulgaris*) from North Africa, presented by Mast. S. E. Thorns; a Large Brown Flying Squirrel (*Pteromys oral*) from the Shevaroy Hills, South India, three American Bisons (*Bison americanus* ♀ ♀ ♀) from North America, a Barraband's Parrakeet (*Polytelis barrabandi*) from New South Wales, deposited; a Mongoose Lemur (*Lemur mongoz*) from Madagascar, purchased; an American Bison (*Bison americanus* ♀) from North America, received in exchange.

OUR ASTRONOMICAL COLUMN.

MADRAS OBSERVATORY.—This year being the centenary of the founding of the Madras Observatory, the officiating astronomer, Mr. C. Michie Smith, prefaces his report with a brief historical sketch. It seems that the East India Company were the first to propose the establishment of such an Observatory, but Sir Charles Oakeley, taking time by the forelock, and, as we are informed, anticipating the orders from the India Office, set about constructing it on his own authority. With the aid of Mr. William Petrie, who placed his own observatory at their disposal, the scheme was soon brought to a practical head, and by the time the orders arrived in 1792 the Observatory, besides being actually built, contained many instruments. The first astronomer was Mr. J. Goldingham. Mr. Thomas Glanville Taylor, F.R.S., was Director of the Observatory from 1830 to 1848. After erecting new instruments, he began his catalogue of 11,000 stars, publishing it in the year 1844. Hourly meteorological and magnetic observations were also carried on by him. He died in England in May 1848, having never completely recovered from a serious injury caused by a fall. In 1849 Captain W. S. Jacob was appointed astronomer; he made a new departure in the form of extra-meridional observations. Owing to ill-health Captain Jacob resigned his appointment in 1859, and during the next two years the office was held partly by Major W. K. Worster, R.A., and Major (now General) J. F. Tennant, R.E. About this time the work of the observatory was delayed, as more modern instruments were being erected, and it was not till May 1862 that the new transit circle of 5 inches aperture and 42-inch circle was ready for use. The late Mr. N. R. Pogson, who had then arrived in Madras as Government Astronomer, commenced his catalogue of 5,000 stars, observing each at least 5 times. He also used very considerably the 8-inch equatorial. The present astronomer, Mr. C. Michie Smith, in his report, suggests a further increase of the observatory equipment.

OXFORD UNIVERSITY OBSERVATORY.—During last month the seventeenth annual report of the Savilian Professor of Astronomy was presented to the Board of Visitors of the University Observatory. This report showed that the work of the Observatory during the past year has been very considerable. The Grubb equatorial, the transit circle, and the De la Rue equatorial have been severally occupied, while the new micrometer for the Grubb instrument has worked efficiently, and forms a valuable addition to the resources of the Observatory. The work upon the international chart has formed one of the important features throughout the year, and for the measurement of the photographic plates a new and costly form of micrometer had to be devised; the réseaux have not proved to be very enduring, so that in consequence a new one had to be obtained from Messrs. Gautier of Paris. The work connected with stellar parallax has now been completed after a period of four years' hard work, and this fact deserves the highest consideration in face of the magnitude of the staff and the amount of work done. The manuscript consists of (1) the concise but complete history of all effective researches in stellar parallax up to the present date; (2) the results of the parallax work completed in this Observatory, extending on the whole to some thirty stars; (3) a catalogue of all parallactic determinations effected by other astronomers. Among some of the other work commenced or completed during the present year we may mention the photometric catalogues of stars of the ninth and eleventh magnitudes within small specified areas for the eighteen Observatories engaged in the international chart, observations of Nova Aurigæ, and the investigation of the amount of light "lost by the moon at the commencement and termination of the lunar total eclipse on November 15, 1891." The finances of the Observatory at present, owing to previous economy, seem to cover the expenditure, but Prof. Pritchard seems to refer to the fact that the quinquennial grant expires at the end of the present year, as if next year the University will be called upon to make a slight additional increase to counterbalance the cost of the instrumental equipment that has been required for the chart work. We are glad to note that at this meeting of the Board Prof. Pritchard was able to attend, having completely recovered from his illness.

GEOGRAPHICAL NOTES.

M. DYBOWSKI has returned to France in bad health. His last work in the French Congo territory was an expedition up the Ubangi to avenge the murder of M. Crampel.

THE Royal Belgian Society of Geography has of late been devoting special attention to home affairs, and in particular to the publication of more or less exhaustive monographs of the local geography of the communes. The last number of their *Bulletin* contains an able summary of the geography of the commune of Familleureux, under the main heads of physical, economic, administrative geography and history, with carefully planned subdivisions. By multiplying such studies, the material for a really exhaustive geography of the country will be obtained. Some such scheme might well be applied to the United Kingdom, where a series of county geographies on a definite system and rigorously edited would be peculiarly